



*PCT*  
JC03 Rec'd PCT/PTO 14 NOV 2005 # 4

PTO/SB/21 (09-04)

Approved for use through 07/31/2006. OMB 0651-0031  
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

## TRANSMITTAL FORM

(to be used for all correspondence after initial filing)

		Application Number	10/523479-Conf. #6126
		Filing Date	February 4, 2005
		First Named Inventor	MORAN, Magdalene M.
		Art Unit	Not Yet Assigned
		Examiner Name	Not Yet Assigned
Total Number of Pages in This Submission	4	Attorney Docket Number	0110313.00138US2

### ENCLOSURES (Check all that apply)

<input type="checkbox"/> Fee Transmittal Form	<input type="checkbox"/> Drawing(s)	<input type="checkbox"/> After Allowance Communication to TC
<input type="checkbox"/> Fee Attached	<input type="checkbox"/> Licensing-related Papers	<input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences
<input type="checkbox"/> Amendment/Reply	<input type="checkbox"/> Petition	<input type="checkbox"/> Appeal Communication to TC (Appeal Notice, Brief, Reply Brief)
<input type="checkbox"/> After Final	<input type="checkbox"/> Petition to Convert to a Provisional Application	<input type="checkbox"/> Proprietary Information
<input type="checkbox"/> Affidavits/declaration(s)	<input type="checkbox"/> Power of Attorney, Revocation	<input type="checkbox"/> Status Letter
<input type="checkbox"/> Extension of Time Request	<input type="checkbox"/> Change of Correspondence Address	<input type="checkbox"/> Other Enclosure(s) (please identify below):
<input type="checkbox"/> Express Abandonment Request	<input type="checkbox"/> Terminal Disclaimer	
<input checked="" type="checkbox"/> Information Disclosure Statement	<input type="checkbox"/> Request for Refund	
<input type="checkbox"/> Certified Copy of Priority Document(s)	<input type="checkbox"/> CD, Number of CD(s) _____	
<input type="checkbox"/> Reply to Missing Parts/ Incomplete Application	<input type="checkbox"/> Landscape Table on CD	
<input type="checkbox"/> Reply to Missing Parts under 37 CFR 1.52 or 1.53		
Remarks		

### SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT

Firm Name	WILMER CUTLER PICKERING HALE AND DORR LLP		
Signature			
Printed name	Lisa N. Geller, Ph.D.		
Date	9 November 2005	Reg. No.	51,726

I hereby certify that this correspondence is being deposited with the U.S. Postal Service with sufficient postage as First Class Mail, in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on the date shown below.

Dated: November 10, 2005

Signature:

I hereby certify that this correspondence is being deposited with the U.S. Postal Service with sufficient postage as First Class Mail, in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on the date shown below.

Dated: November 10, 2005 Signature: Lisah Farn  
(Sarah Farris)

Docket No.: 0110313.00138US2  
(PATENT)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of:  
Magdalene M. MORAN et al.

Application No.: 10/523479

Confirmation No.: 6126

Filed: February 4, 2005

Art Unit: Not Yet Assigned

For: SPERM-SPECIFIC CATION CHANNEL,  
CATSPER3, AND USES THEREFOR

Examiner: Not Yet Assigned

INFORMATION DISCLOSURE STATEMENT (IDS)

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Dear Sir:

Applicants hereby make of record the publications listed on the attached Form PTO/SB/08a/b. Copies of all cited references are enclosed.

This Information Disclosure Statement is being filed prior to the mailing date of a first Office Action on the merits. No fee is required.

Applicants request that the Examiner initial and return a copy of the enclosed Form PTO SB-08 with the next communication.

Dated: 9 November 2005

Respectfully submitted,

By L.N. Geller

Lisa N. Geller, Ph.D.

Registration No.: 51,726  
WILMER CUTLER PICKERING HALE AND  
DORR LLP  
60 State Street  
Boston, Massachusetts 02109  
(617) 526-6000  
Attorney for Applicants

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/B/PTO				<b>Complete if Known</b>	
				Application Number	10/523479-Conf. #6126
				Filing Date	February 4, 2005
				First Named Inventor	MORAN, Magdalene M.
				Art Unit	N/A
				Examiner Name	Not Yet Assigned
Sheet	1	of	2	Attorney Docket Number	110313.138 US2

U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. <sup>1</sup>	Document Number	Publication Date	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code <sup>2</sup> (if known)	MM-DD-YYYY		

FOREIGN PATENT DOCUMENTS					
Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document	Publication Date	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Country Code <sup>3</sup> -Number <sup>4</sup> -Kind Code <sup>5</sup> (if known)	MM-DD-YYYY		
BA	WO-00/61624		10-19-2000	Human Genome Sciences, Inc.	
BB	WO-01/07611		02-01-2001	Genentech, Inc.	
BC	WO-01/54477		08-02-2001	Hyseq, Inc.	
BD	WO-01/75067		10-11-2001	Hyseq, Inc.	
BE	WO-02/090567		11-14-2002	Children's Medical Center, Corporation	
BF	WO-03/089583		10-30-2003	Origene Technologies, Inc.	
BG	WO-03/091434		11-06-2003	Takeda Chemical Industries, Ltd.	
BH	WO-03/099865		12-04-2003	Inpharmatica Limited	

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. <sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> See Kinds Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

NON PATENT LITERATURE DOCUMENTS					
Examiner Initials	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.			T <sup>2</sup>
CA	Amoult et al., "Activation of mouse sperm T-type Ca <sup>2+</sup> channels by adhesion to the egg zona pellucida," Proc. Natl. Acad. Sci. USA, Vol. 93, pp. 13004-13009.				
CB	Bedford, "Mammalian Fertilization Misread? Sperm Penetration of the Eutherian Zona Pellucida Is Unlikely to be a Lytic Event," Biology of Reproduction, Vol. 59, pp. 1275-1287.				
CC	Darszon et al., "Ion Channels in Sperm Physiology," Physiological Reviews, Vol. 79, No. 2, April 1999, pp. 481-510.				
CD	Database EMBL, 11 October 2001, XP002314905, Database Accession No. AAS90759				
CE	Database EMBL, 14 November 1997, XP002314900, Database Accession No. AA662668				
CF	Database EMBL, 2 March 2000, XP002314904, Database Accession No. AW472972				
CG	Database EMBL, 3 March 2000, XP002306736, Database Accession No. AA416577				
CH	Database EMBL, 2 December 2000, XP002314901, Database Accession No. BF436942				
CI	Database EMBL, 9 May 2001, XP002314908, Database Accession No. BG718343				
CJ	Database EMBL, 8 June 2000, XP002314899, Database Accession No. AW971983				
CK	Database EMBL, 8 October 2001, XP002314906, Database Accession No. BI826910				
CL	Database EMBL, 15 October 2001, XP002306740, Database Accession No. AF407332				
CM	Database EMBL, 29 November 2001, XP002314910, Database Accession No. ABL90376				
CN	Database EMBL, 1 December 2001, XP002306739, Database Accession No. Q91ZR5				

Examiner Signature	Date Considered
--------------------	-----------------

Substitute for form 1449A/B/PTO				<b>Complete if Known</b>	
				Application Number	10/523479-Conf. #6126
				Filing Date	February 4, 2005
				First Named Inventor	MORAN, Magdalene M.
				Art Unit	N/A
				Examiner Name	Not Yet Assigned
Sheet	2	of	2	Attorney Docket Number	110313.138 US2

CO	Database EMBL, 11 September 1997, XP002314902, Database Accession No. AA574312
CP	Database EMBL, 30 November 1999, XP002314903, Database Accession No. AW197851
CQ	Database EMBL, 3 March 2000, XP002306735, Database Accession No. AA416682
CR	Database EMBL, 30 May 2000, XP002306734, Database Accession No. AP000586
CS	Database EMBL, 20 October 2000, XP002314898, Database Accession No. BF092492
CT	Database EMBL, 25 January 2001, XP002314968, Database Accession No. BF934163
CU	Database EMBL, 8 October 2001, XP002314907, Database Accession No. BI829451
CV	Database EMBL, 15 October 2001, XP002306738, Database Accession No. AF407333
CW	Database EMBL, 29 November 2001, XP002314911, Database Accession No. ABB89967
CX	Database EMBL, 1 December 2001, XP002306737, Database Accession No. Q96P76
CY	Database EMBL, 25 March 2004, XP002314912, Database Accession No. ACN41330
CZ	Database EMBL, 9 May 2001, XP002314909, Database Accession No. BG718245
CA1	Garbers, "Ion channels. Swimming with sperm," Nature, Vol. 413, No. 6856, Oct 2001, pp. 579, 581-582, XP 002314956
CB1	Hyne and Garbers, "Calcium-dependent increase in adenosine 3', 5'-monophosphate and induction of the acrosome reaction in guinea pig spermatozoa," Proc. Natl. Acad. Sci. USA, Vol. 76, No. 11, pp. 5699-5703.
CC1	Jungnickel et al., "Trp2 regulates entry of Ca <sup>2+</sup> into mouse sperm triggered by egg ZP3," Nature Cell Biology, Vol. 3, May 2001, pp. 499-502.
CD1	O'Toole et al., "Ca <sup>2+</sup> Entry through Store-operated Channels in Mouse Sperm Is Initiated by Egg ZP3 and Drives the Acrosome Reaction," Molecular Biology of the Cell, Vol. 11, pp. 1571-1584, May 2000.
CE1	Quill et al., "A voltage-gated ion channel expressed specifically in spermatozoa," PNAS, Vol. 98, No. 22, 12527-12531.
CF1	Ren et al., "A Sperm Ion Channel Required for Sperm Motility and Male Fertility," Nature, Macmillian Journals Ltd., London, Vol. 413, No. 6856, October 11, 2001, pp 603-609
CG1	Santi et al., "A dihydropyridine-sensitive T-type Ca <sup>2+</sup> current is the main Ca <sup>2+</sup> current carrier in mouse primary spermatocytes," American Journal of Physiology, Vol. 271, pp. C1583-93, 1996.
CH1	Serrano et al., "Voltage-dependent Ca <sup>2+</sup> channel subunit expression and immunolocalization in mouse spermatogenic cells and sperm," FEBS Letters, 462, pp. 171-176, 1999.
CI1	Strausberg, Homo Sapiens, Clone Image. 03 March 2003, pages 1-3, especially pages 2-3.
CJ1	Tash, "Role of the eAmp, Calcium, and Protein Phosporylation in Sperm Motility," Controls of Sperm Motility: Biological and Clinical Aspects, ed. Gagnon, pp. 229-240, 1990.
CK1	Wassarman et al., "A profile of fertilization in mammals," Nature Cell Biology, Vol. 3, E59-E64, February 2001.
CL1	Wennemuth et al., "Cav2.2 and Cav2.3 (N- and R-type) Ca <sup>2+</sup> Channels in Depolarization-evoked Entry of Ca <sup>2+</sup> into Mouse Sperm," The Journal of Biological Chemistry, Vol. 275, No. 28, pp. 21210-21217, 2000.
CM1	Weyand et al., "Cloning and functional expression of a cyclic nucleotide-gated channel from mammalian sperm," Nature, Vol. 368, pp. 859-863, April 28 1994.
CN1	Wiesner et al., "Cyclic Nucleotide-gated Channels on the Flagellum Control of Ca <sup>2+</sup> Entry into Sperm," The Journal of Cell Biology, Vol. 142, No. 2, pp. 473-484, 1998.
CO1	Yanigimachi, "Mammalian Fertilization," The Physiology of Reproduction, Second Edition, eds. Knobil and Neill, pp. 189-317, 1994.

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Examiner Signature	Date Considered
--------------------	-----------------